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Claims

1. Axial piston compressor with a drive shaft (12) for a disc (14) that is mounted on the drive shaft in such a way that it can be tilted relative to the drive shaft about a pivotal axis (C), and at least one piston (18), wherein the pivotal axis (C) of the disc (14) is disposed eccentrically with respect to the mid-plane of the disc,
characterized in that the piston (18) is provided with at
least two sliding blocks (20) that move along the disc (14)
on a slideway, arranged such that the piston (18) encloses
the sliding blocks (20) in a C-shaped structure, and that
the position of the pivotal axis (C) relative to the mid-
plane of the disc is on the side that faces the the piston
(18), so that the disc (14) can be moved relative to the
sliding blocks (20) in such a way that the slideway of the
sliding blocks projects beyond the the edge of the disc
only slightly or not at all.
2. Axial piston compressor according to Claim 1,
characterized in that the disc is a swash plate (14), which
can be set into rotation by the drive shaft (12) and can be
adjusted to various tilt angles (α) with respect to the
drive shaft.
3. Axial piston compressor according to Claim 1 or 2,
characterized in that the disc is a wobble plate that is
rotatably mounted on a swash plate and is set at a tilt
angle with respect to the drive shaft that corresponds to
the angle of the swash plate.

4. Axial piston compressor according to one of the preceding claims,
characterized in that, given a distance of 30 mm between
the long axis (L) of the drive shaft and the long axis (Z)
of the piston, an 8-mm diameter of the flat surface (22) of
the sliding blocks (20), which is apposed to the slideway,
and a maximal tilt angle (α) of 18° between the long axis
of the drive shaft and the central axis of the disc, the
distance between the mid-plane of the disc and the pivotal
axis of the disc (14) is no greater than about 1 mm.

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